

An Inaugural Dissertation,
On
Placenta Praevia,
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Placenta Praevia.

In discussing this subject it first becomes necessary in order that we may familiarize ourselves with the abnormality, to examine into the structure and functions of the organ.

First as to the structure:

We find it a soft spongy vascular body, adhered to the uterus, and connected with the foetus by the umbilical cord. It is not in existence during the first period of the embryonic state, but its formation commences upon, or soon after its arrival in the uterus from the fallopian tube. We find its size to vary; usually it is about threequarters

of an inch in thickness at the centre, and tapering off towards the circumference, which does not ordinarily exceed two or three lines. At times one diameter is longer than the others, and the shape therefore is circular or oval, according to circumstances.

It also presents for examination a foetal, or internal, and an external or uterine surface. The internal surface is covered by both the amnion and chorion, and the umbilical arteries and vein having reached this portion of the placenta, divide into several large branches, which are found between the amnion and chorion; the latter being closely adhered to the several vessels forming a sheath in which one vein and one artery are always found; the former being much the larger. Shortly after, each trunk divides into two branches, and thus go on

continuing to divide and subdivide almost ad infinitum,

We find bloodvessels in communication with the placenta from the maternal side penetrating the placenta at all points of its uterine surface, forming in the substance of the placenta, a network of exceedingly delicate meshes, which ramify in all directions. It is argued that the maternal branches never communicate by their terminal extremities with those of the foetal, and I think not without foundation, from the fact, that if the finest injection be made there has never been established any direct communication between those two orders of vessels, unless by the rupture of their walls. The external surface, also, is covered by the decidua; this membrane was formerly represented to be the external covering of the foetus, in utero, and

some still maintain that idea. Vazeaux says that "this is the true maternal placenta, which is thrown off in connection with the foetal placenta, and which covers the convex surface of the cotyledons to the depth of about one-eighth of an inch." The decidua is admitted by most writers upon the subject, to be composed of the inner portion of the mucous membrane of the uterus, and is of a tubular structure, which acquires the thickened appearance that Vazeaux speaks of within a short time after conception.

Now the placenta is adhered to the uterus, and the question may be asked, "In what way?" Dr. Reid remarks "that it may be regarded in the light of a large sack, formed by the prolongation of the inner coat of the uterine walls, which dip down into the foetal surface, carrying with them a portion of the

thin wall, which forms a sheath for each tuft." The maternal blood is also conveyed into the placenta by means of the curling arteries of the uterus, and is received back from it by means of large veins called sinuses. That this is the case seems to be beyond a doubt. From the fact that immediately upon the expulsion of the placenta, if we examine closely, there can be observed the remnants of bloodvessels, which have been torn off by the expulsive efforts of the uterus, hence cause of hemorrhage.

I will now consider very briefly some of the most important functions of the placenta, although it has no very intimate connection with the subject in question, yet it may not be amiss to give a cursory description of one or two of its more important functions.

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The main function appears to be like that of the lungs in the adult. It admits of the blood of the foetus being transmitted to that of the mother, and undergoing the necessary changes. As to the nutritive materials, it must be admitted that they are furnished by the mother's body. Until the allantois, or umbilical cord is formed, it is said - and this looks sufficiently plausible to satisfy any one that such must be the case - to be nourished by the vitellus. After the umbilical cord is formed, the nourishment must come from the mother.

It has been argued by some authors, that as the amniotic fluid contains nutritive properties, the foetus must be nourished by this fluid, but this looks almost (or quite) improbable; and it is now conceded

by all, that the nutrition for the development of the foetus, must all come through the umbilical cord; and the amniotic fluid is simply excrementitious matter, which is thrown off from the foetus. This fluid is more abundant in the early months of pregnancy, and its relative quantity diminishes as pregnancy advances.

Having in a somewhat superficial manner, spoken of the structure, and some of the functions of the placenta, I shall endeavor briefly, to describe "Placenta praevia", with—as I think—the proper plan of procedure, under such circumstances.

In the normal state, the most frequent ^{point} of insertion of the placenta, is said to be about the situation of the right fallopian tube; yet it may be

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called normal when it has its insertion on any portion of the uterus, except on or near the orifice. There are many theories in regard to "placenta praevia." Some of the older writers supposed that it had been detached from where it was originally inserted, and consequently had fallen on the neck of the uterus. This might possibly happen, but it is not probable, for it has been found firmly attached over the neck of the womb, either partially or entirely covering it. These insertions have received different names: as marginal, when the placenta extends very near the circumference of the orifice; incomplete or partial when it covers it only in part; complete or central, when it covers it entirely.

These insertions give rise to what

has been designated, unavoidable hemorrhage, which takes place during gestation, and in the course of parturition. The flooding is an immediate result of gestation during the last three months of pregnancy, and particularly of labor. That flooding is in greater danger of coming on during the last three months of pregnancy, is easily explained, as the neck of the uterus does not dilate at its superior part during the first six months of gestation; during this time, the uterus is developed more at the expense of the fibres at the superior part of the body or fundus of the organ; while in the last three months, the fibres of the lower third of the uterus, are developed very rapidly. Now it is evident, from this, that during the first six months of gestation, the development of the placenta

must be simultaneous with that of the growth of the uterine walls, and consequently no hemorrhage need occur; while in the latter three months the placenta can no longer participate in the rapid development by conforming to the increase of the uterus, and consequently spreads out from the centre towards the circumference, and causing the fissures between the cotyledons to be widely separated, and giving rise to rupture of the utero placental vessels.

The hemorrhage produced by the implantation of the placenta over the neck of the uterus, is the gravest of all hemorrhages. It not only endangers the life of the mother, but also that of the child; it endangers the life of the mother on account of its liability to occur at any

time during the latter period of gestation, in a constantly increasing amount, and on account of its always being present during labor, it usually requires the intervention of art. It endangers the life of the child on account of the interruption of the utero-placental circulation, resulting from the intervention of art, producing asphyxia, that may prove fatal.

When a physician is called to a case of flooding, and having ascertained that he has a case of placenta praevia to deal with, how important it is, that he should have the knowledge necessary to enable him to act promptly. He should be able to realize the responsibility resting upon him, and that unless prompt and efficient remedial agencies be at once resorted to, the life of both mother and

child may be sacrificed.

There have been various plans spoken of by different authors. If she be not far enough advanced in pregnancy to enable us to deliver with safety to both the mother and child, our first effort should be to arrest the hemorrhage; and in fact whether she be far enough advanced or not, this should be our first object, and there are various ways in which this may be accomplished. The patient should be kept in a recumbent position, and allowed to remain as quiet as possible; her hips may be slightly elevated, and her head and shoulders kept low; then by the use of the properly selected Homoeopathic remedy, we may sometimes succeed in arresting the hemorrhage; but there are cases, in which, we may have exercised

all the care imaginable in selecting the proper remedy, and still, the hemorrhage is not arrested; when it becomes imperative upon the physician to deliver as speedily as possible.

The first thing necessary, is to ascertain whether the os is dilated or dilatable; if not, necessary measures must be taken to cause this. This having been accomplished, it then remains for the physician to decide what treatment he shall next adopt, in order to enable him to secure the most satisfactory results. And in my opinion that plan is the following: viz. Pass the finger into the neck of the uterus, and force it through the placenta; being careful however, that this puncture be made between the lobes or cotyledons of the placenta. This will allow the liquor amnii to escape, and

the hemorrhage will most likely be arrested. Some recommend that this should be done with the female catheter, instead of the finger; this may be advisable, as it does not allow the liquor amnii to escape so rapidly at first. Then by enlarging the opening already made, labor progresses, and the child is borne without much difficulty.

This plan of procedure is objected to by some; yet from the experience of those who have given it a fair test, it has proven entirely satisfactory, and numerous instances might be given, where, in all probability life has been saved.

Some accoucheurs recommend the delivery of the placenta first. Although I do not feel disposed to condemn this plan entirely, yet, it does appear like unnecessarily exposing the patient to the

profuse hemorrhage, that must necessarily follow a detachment of the placenta. And this is not all; should the child be alive after the delivery of the placenta, it will undoubtedly perish before it can be borne, unless there be a very speedy delivery effected.

The plan of delivering through the placenta has not been very extensively practised in this country; consequently, most accoucheurs feel somewhat of a delicacy about attempting it; yet from the testimony of those who have practiced it, we have every reason to believe from the success which has attended their efforts, that it is worthy the consideration of every practitioner.

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